

MM	MM	SSSSSSSS	GGGGGGGG
MM	MM	SSSSSSSS	GGGGGGGG
MMMM	MMMM	SS	GG
MMMM	MMMM	SS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SSSSSS	GG
MM	MM	SSSSSS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SS	GG
MM	MM	SSSSSSSS	GGGGGGGG
MM	MM	SSSSSSSS	GGGGGGGG

RRRRRRRR	EEEEEEEEE	QQQQQQ
RRRRRRRR	EEEEEEEEE	QQQQQQ
RR	EE	QQ
RRRRRRRR	EEEEEEEEE	QQ
RRRRRRRR	EEEEEEEEE	QQ
RR	EE	QQ
RRRRRRRR	EEEEEEEEE	QQQQQQ
RRRRRRRR	EEEEEEEEE	QQQQQQ

XSBTTL 'Required file for MESSAGE source modules'

Require file for all modules in the message compiler

Version: 'V04-000'

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FACILITY: MESSAGE compiler

ABSTRACT:

This is the common require file for all modules in the
message compiler.

ENVIRONMENT:

VAX/VMS operating system, unprivileged user mode utility.
operates at non-AST level.

AUTHOR: Tim Halvorsen, Nov 1979

MODIFIED BY:

V03-002 GJA0052 Greg Awdziewicz 23-Nov-1983
Add size literal and field definitions for the queue of input
file specifications.
Add subtitles.
Add error code for parsefail.

V03-001 BLS0168 Benn Schreiber 2-Apr-1982
Do not require MSGDEF as it is now in STARLET and LIB

MSG.REQ:1

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1 - - - -

CV1
015
015
016
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016

MSG.REQ;1

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%SBTTL 'Internal definitions'

! Define message structure definitions

REQUIRE 'LIB\$:MSGINT.B32': ! Message compiler internal definitions

ZSBTTL 'Required file for MESSAGE source modules'

Define fields for the queue element for an input filename and
define a literal for size of the element:

FIELD

```
info_queue_flds =  
SET  
  queue_flink =  [0, 0, 32, 0],      ! Forward link for queue.  
  queue_blink =  [4, 0, 32, 0],      ! Backward link.  
  name_desc =    [8, 0, 0, 0],       ! Descriptor for filename:  
  name_length =  [8, 0, 16, 0],      ! ... length subfield,  
  name_addr =    [12, 0, 32, 0]      ! ... address subfield.
```

TES;

LITERAL

```
queue_element_size= 16;      ! Total (byte)size of queue element.
```

Define VMS block structures

STRUCTURE

```
bblock [o, p, s, e; n] =  
[n]  
(bblock+o)<p,s,e>;
```

SSH_R_MESSAGES - a macro which defines facility-specific message codes which are based on the system-wide shared message codes.

SSH_R_MESSAGES(name, code, (msg,severity), ...)

where:

"name" is the name of the facility (e.g., COPY)

"code" is the corresponding facility code (e.g., 103)

"msg" is the name of the shared message (e.g., BEGIN)

"severity" is the desired message severity (e.g., 1, 0, 2)

MACRO

SSH_R_MESSAGES(FACILITY_NAME, FACILITY_CODE) =

[LITERAL

SHR\$MSG_IDSC(FACILITY_NAME, FACILITY_CODE, %REMAINING); %,

SHR\$MSG_IDSC(FACILITY_NAME, FACILITY_CODE) [VALUE] =

SHR\$MSG_CALC(FACILITY_NAME, FACILITY_CODE, %REMOVE(VALUE)) %,

SHR\$MSG_CALC(FACILITY_NAME, FACILITY_CODE, MSG_ID, SEVERITY) =

%NAME(FACILITY_NAME,'\$MSG_ID) = %NAME('SHR\$_',MSG_ID) + FACILITY_CODE*65536 +

%IF %DECLARED(%NAME('STSSK ',SEVERITY))

%THEN %NAME('STSSK ',SEVERITY)

%ELSE SEVERITY %FI%

Equated symbols

LITERAL

```
true      = 1;           ! Boolean true
false     = 0;           ! Boolean false
ok        = 1;           ! Success return code
```

Define CLI qualifier flags (see cli_flags)

LITERAL

```
SEQLST (QUAL,,0,1,
(listing,),
(object,),
'file',
.mdl,,
.sdl,,
(input,),
(symbols,),
(text,));
```

! /LISTING qualifier present
! /OBJECT qualifier present
! /FILE qualifier present
! /MDL qualifier present
! /SDL qualifier present
! Input parameter present
! /SYMBOLS qualifier present
! /TEXT qualifier present

MAK

PRO

0
1
2
3
4
5
6
7

ENT

0

VAR

4
6
2
4

ARR

7
2
3
4
5
6
7

LAB

Define message codes.

```
$shr_messages(msg,151,
  (syntax,severe),      | Syntax error
  (openin,error),       | Unable to access input file
  (openout,severe),     | Unable to access output file
  (readerr,severe),     | Error reading input file
  (closedel,error),     | Unable to close input file
  (parsefail,error),    | Error parsing file specification
  (searchfail,error),   | Error searching for file
  (writeerr,error),     | Error writing file
);
```

MACRO

```
emsg(ident) =
  BEGIN
    %IF NOT %DECLARED(%NAME('msg$',ident))
      %THEN EXTERNAL LITERA[ %NAME('msg$',ident); %FI
    %NAME('msg$',ident)
  END%;
```

%SBTTL "

0251 AH-BT13A-SE
VAX/VMS V4.0

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MSGINT
MDL

SDLGENREQ
REQ

MSGDEF
SOL

CUTMSGCOM
FOR

CUTMSG
LIS

MSG
REQ

LISTING
LIS

MAIN
LIS